#### IOWA HIGHWAY RESEARCH BOARD

Minutes of May 31, 2002

#### **Regular Board Members Present**

J. AdamR. KrauelJ. BygK. MahoneyR. EttemaM. NahraJ. GeorgeJ. SelmerR. GouldC. Van BuskirkL. GreimannJ. WeberD. JuliusW. Weiss

B. Keierleber

#### **Alternate Board Members Present**

L. Brehm C. Marker R. Fosse G. Miller

L. Jesse

#### **Board Members With No Representation**

None

### **Secretary**

M. Dunn

#### **Visitors**

Steve DeVries Iowa County Engineers Association - Service Bureau

Gordon Smith *Iowa Concrete Paving Association* Sara Buseman Iowa Department of Transportation Iowa Department of Transportation Ed Engle Jim Grove Iowa Department of Transportation Mike Heitzman *Iowa Department of Transportation* Sandra Larson Iowa Department of Transportation Phil Meraz Iowa Department of Transportation Mohammad Mujeeb Iowa Department of Transportation Ananto Prasetyo *Iowa Department of Transportation* Wally Rippie Iowa Department of Transportation **Bob Steffes** *Iowa Department of Transportation* 

Jim Cable Iowa State University
Scott Schlorholtz Iowa State University
Kejin Wang Iowa State University

Steve Andrle Iowa State University/CTRE
Ed Jaselskis Iowa State University/CTRE
Omar Smadi Iowa State University/CTRE

Dale Harrington Iowa State University/CTRE - PCC Center

Joaquin "Jack" Lopez Samsung SDS

Yi-Hsien Chen The University of Iowa Hosin "David" Lee The University of Iowa The meeting was held in the Large Materials Conference Room at the Iowa Department of Transportation, Ames, Iowa. The meeting was called to order at 9:00 A.M. by Wade Weiss.

#### **Introduction of Member/Alternate changes**

• Wade Weiss introduced Jerry Byg, City of Ames, as the new regular city member. His alternate is Rick Fosse, City of Iowa City. The alternate for Randall Krauel is still to be announced.

#### Agenda review/modification

• Agenda item #9 time was noted as 15 minutes.

### **Approval of the minutes**

 Mark Nahra moved to approve the minutes from the April 26, 2002 meeting with no additions or corrections. Randall Krauel seconded. Carried with 13 yes, 0 no, and 0 abstaining.

#### **Discussion on location of June meeting**

• It was decided that the June meeting will be held at Fontana Park in Buchanan County. Details will be included in the June board packet.

#### **Review of research fund balances**

• The fund balances for FY 01-02 were reviewed. It was requested that Mark Dunn add percentages to the report summarizing the amount of funds supporting research resulting from the IHRB priorities versus unsolicited research.

#### Research Topic Prioritization for FY 02-03

• The initial ballot and list, with short description, of brainstormed and past topics were e-mailed to members and alternates prior to the meeting. Ballot (one per regular member seat) results had been compiled by Mark Dunn and results of the overall ranking were e-mailed to members and alternates prior to the meeting. With an additional ballot coming in after that time, a final overall ranking list was handed out at the meeting. After reviewing the overall ranking results, each regular member seat was allowed to vote on each topic he or she wanted to have included in the final priority list. Each seat was allowed a total of 20 votes, with no more than 5 votes going toward any one topic (voting done by show of fingers for number of votes as topic was read aloud). The results were summarized and handed out later in the meeting. The top 20 - 25 will be considered the final priorities. Mark Dunn, with the assistance of the author of the topic idea, will develop RFPs for the top few to be reviewed at the June meeting.

#### Final report, HR-388, "Total Cost of Transportation Analysis of Road and Highway Issues"

- Steve DeVries presented the research objectives; source issues; concept implementation and testing; Iowa County roads model, including tables and graphs; system adequacy; range of capabilities; and summary of the developed total cost spreadsheet.
- The standard error of the data was discussed. It was not mentioned in the report, but is estimated to be within 4-5%.

- A CD of this final report will be distributed to all counties.
- Steve DeVries submitted this report as an individual engineer, not tied with an organization. The original contract was entered into with Mills County. A contact address will be added to the final report prior to distribution.
- Jim George moved to approve the final report. Mark Nahra seconded. Carried with 15 yes, 0 no, and 0 abstaining.

#### Problem Statement/Proposal, "Total Cost of Transportation Analysis - Phase II"

- Steve DeVries, Iowa County Engineers Association Service Bureau, followed his final report with a problem statement/proposal to use the developed county road model spreadsheet and reload the model with current data, since the data from HR-388 was collected from 1996 to 2002. He stated a few changes that he would like to see, including refining the Human Resources aspect of costs. There is also a committee that will help develop further refine the model.
- It was requested that the standard error be stated in the report.
- This project will be conducted through the Iowa County Engineers Association Service Bureau.
- Mark Nahra moved to approve the problem statement as a proposal for Phase II. Christie Van Buskirk seconded. Carried, 15 yes, 0 no, and 0 abstaining.

#### Problem Statement, "Materials and Mix Optimization Procedures for PCC Pavements"

- Scott Schlorholtz, Iowa State University, presented the overview, assumptions, purpose, scope, goal, information on both field and lab study segments, time frame and budget of the proposed research.
- This project is unsolicited, but comes in with designated FHWA funds of \$153,600.
- Support and need of this research was expressed by Sandra Larson, Director of the Research and Technology Bureau, and others from the DOT.
- John Adam moved that a proposal be brought back to the Board for consideration. Brian Keierleber seconded. Carried, 15 yes, 0 no, and 0 abstaining.

# Problem Statement/Proposal, "Installation and Maintenance of Weigh In Motion Detection System on Iowa Highway 13 in Delaware County"

- Jim Cable, Iowa State University, presented the background of the funding structure for this research and information on this particular part of the project, including equipment installation, maintenance and monitoring, plus how it fits with the entire research project of "Evaluation of Composite Pavement Unbonded Overlays."
- The IHRB Funds were requested to meet the state match requirements for approximately \$198,000 in Federal Funds already appropriated for the conduct of this project.

• John Adam moved that this be accepted as a proposal due to timing of the project. Kevin Mahoney seconded. Carried with 15 yes, 0 no, and 0 abstaining.

# Proposal, "Investigation into Improved Pavement Curing Materials and Techniques: Part 2 (Phase III)"

- Jim Cable, Iowa State University, presented information for the proposed field research, including a breakdown on the test sections and what will be monitored. The amount of the proposal was lower than the anticipated amount listed in the problem statement due the fact that the contractor's required extra work reimbursement was less than the original estimate.
- Randall Krauel moved to approve the research. Mark Nahra seconded. Carried with 15 yes, 0 no, and 0 abstaining.

# Proposal, "Investigation into the Long Term Effects of Magnesium Chloride and Other Concentrated Salt Solutions on Pavement and Structural Portland Cement Concrete"

- Mark Dunn gave the history of the IHRB original RFP on this topic. The RFP was sent out for
  proposals to be reviewed at the January meeting. Just before the review of proposals,
  information came in about the South Dakota Pooled Fund Study. The board decided to table
  action until more specific information was received.
- With the information that came in from South Dakota, Mark Dunn recommended that the Board approve \$80,000 to be put into the SD Pooled Fund Study. The IHRB original RFP estimated funding at \$150,000-\$180,000. SD was asking for a minimum of \$50,000.
- It was requested that, as a general rule, on projects that have a benefit to all state, counties and cities, that the percentages of funds for that project are kept approximately proportional to the total annual contribution from each (40% Primary, 50% Secondary, and 10% Street).
- Mark Nahra moved that funding of \$80,000 be approved for the SD Pooled Fund Study at a 45% Primary, 45% Secondary and 10% Street funding split. Randall Krauel seconded. Carried with 15 yes, 0 no, and 0 abstaining.

# Continued discussion on the process for unsolicited proposals that ends up as a priority topic within the Business Plan

• After discussion, it was decided to consider the proposal/topic in question on a case by case basis. There may be times that a proposal/topic is submitted, ends up as a priority and the original PI with the idea would be in the best position to do the research (ie.) due to a unique specialty or equipment). There may also be times that a submitted proposal/topic becomes a priority and would be in the best interest of the board to send out an RFP to receive competitive proposals.

#### **New Business**

• None

## Wade Weiss adjourned the meeting.

Date of Next Meeting: THE NEXT MEETING WILL BE HELD FRIDAY, JUN MEETING ROOM AT FONTANA PARK, SOUTH OF BUCHANAN COUNTY.	·
	Mark Dunn, IHRB Secretary